

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

|  | <u> </u>  |                        |   |  |
|--|---|------------------------|---|--|
| Applicant's or agent's file reference  | FOR FURTHER ACTION See Form PCT/IPEA/416  |                        |   |  |
| P358PC00   |   | <u> </u>               |   |  |
| International application No.  | International filing date (da   | y/month/year)          | Priority date (day/month/year)  |  |
| PCT/SE2003/000011  | 08-01-2003  |                        | -   |  |
| International Patent Classification (IPC) o  | r national classification and   | IPC                    |   |  |
| G01S 5/14, G01S 5/00   |   |                        | ·   |  |
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| •  |   | ···                    |   |  |
| Applicant  |   |                        |   |  |
| Envirotainer Engineer  | ing AB et al  |                        |   |  |
| This report is the international pro-<br>Authority under Article 35 and to   | eliminary examination report<br>ransmitted to the applicant ac                        | cording to Article     | is International Preliminary Examining 36.  |  |
| 2. This REPORT consists of a total   | of 5 sheets, i  | ncluding this cove     | r sheet.  |  |
| 3. This report is also accompanied by  |   |                        | ·   |  |
|  |   |                        |   |  |
|  | t and to the International Bu   | _                      |   |  |
| and/or sheets Administrati   | s containing rectifications au<br>ve Instructions).<br>supersede earlier sheets, but  | thorized by this Autho | re been amended and are the basis of this report athority (see Rule 70.16 and Section 607 of the crity considers contain an amendment that goes ed, as indicated in item 4 of Box No. I and the |  |
| Supplementa  |   | application as the     | sa, as indicated in item 4 of Box 110. I and the  |  |
|  | :! D  | (indicate time and     | number of electronic carrier(s))  |  |
| b. [] (sent to the Internati   |   |                        | number of electronic carrier(s))  |  |
| , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the |   |                        |   |  |
| Administrative Instr   |   |                        |   |  |
| 4. This report contains indications  | relating to the following item  | ns:                    |   |  |
| Box No. I Basis  | of the report   |                        |   |  |
| Box No. II Priorit   | ty  |                        |   |  |
| Box No. III Non-e  | stablishment of oninion with  | regard to novelty      | , inventive step and industrial applicability   |  |
| i <u> </u>   | of unity of invention   |                        | ,   |  |
| l L  |   | 25(2)                  |   |  |
| applic   | oned statement under Article<br>eability; citations and explana<br>in documents cited | ations supporting s    | to novelty, inventive step or industrial such statement   |  |
|  |   | 11                     |   |  |
|  | in defects in the international   |                        |   |  |
| Box No. VIII Certa   | in observations on the interna  | ational application    | l e e e e e e e e e e e e e e e e e e e   |  |
|  |   | Data - F. c 1 - 1 - 1  | on of this report   |  |
| Date of submission of the demand   |   | Date of completion     | on of this report   |  |
|  |   | i                      |   |  |
| 05-08-2004   |   | 04-04-200              |   |  |
| Name and mailing address of the IPEA/SE  |   | Authorized office      | er  |  |
| Patent- och registreringsverke   | et  |                        |   |  |
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Form PCT/IPEA/409 (cover sheet) (January 2004)

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

| national application No. |
|--------------------------|
| PCT/SE2003/000011        |

| Box | No. I               | Basis of the report   |
|-----|---------------------|---|
| 1.  | otherwis            | egard to the language, this report is based on the international application in the language in which it was filed, unless se indicated under this item.  |
|     | ר 📋 י               | This report is based on a translation from the original language into the following language , which is the language of a translation furnished for the purposes of:  |
|     |                     | international search (under Rules 12.3 and 23.1(b))   |
|     |                     | publication of the international application (under Rule 12.4)  |
|     |                     | international preliminary examination (under Rules 55.2 and/or 55.3)  |
| 2.  | furnishe<br>and are | egard to the elements of the international application, this report is based on (replacement sheets which have been ed to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" e not annexed to this report):  the international application as originally filed/furnished |
|     |                     |   |
|     |                     | the description:  pages as originally filed/furnished   |
|     |                     | pages as originally filed/turnished pages* received by this Authority on  |
|     |                     | pages* received by this Authority on  |
|     |                     | the claims:   |
|     |                     | pages as originally filed/furnished   |
| 1   |                     | pages* as amended (together with any statement) under Article 19  |
|     |                     | pages* received by this Authority on  |
|     |                     | pages* received by this Authority on  |
|     |                     | the drawings:   |
|     |                     | pages as originally filed/furnished   |
|     |                     | pages* received by this Authority on received by this Authority on  |
|     |                     |   |
|     |                     | a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.   |
| 3.  |                     | The amendments have resulted in the cancellation of:  |
|     |                     | the description, pages  |
|     |                     | the claims, Nos.  |
|     |                     | the drawings, sheets/figs   |
|     |                     | the sequence listing (specify):   |
|     |                     | any table(s) related to the sequence listing (specify):   |
| 4.  |                     | This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).   |
|     |                     | the description, pages  |
|     |                     | the claims, Nos.  |
|     |                     | the drawings, sheets/figs   |
|     |                     | the sequence listing (specify):   |
|     |                     | any table(s) related to the sequence listing (specify):   |
| *   | If iten             | n 4 applies, some or all of those sheets may be marked "superseded."  |

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

hational application No.
PCT/SE2003/000011

| Box | No. V     | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
|-----|-----------|---|
| 1.  | Statement |   |

2. Citations and explanations (Rule 70.7)

Documents cited in the International Search Report:

- A US 2002017989 Al (IAN J.FORSTER ET AL), 14 February 2002
- B US 2001052850 Al (HARRY I.ZIMMERMAN), 20 December 2001
- C EP 0984418 A2 (N.V. NEDERLANDSCHE APPARATENFABRIEK NEDAP),
- 8 March 2000
- D 2002057192 Al (JAMES G.EAGLESON ET AL), 16 May 2002

Document A is reconsidered to represent the state of the art, together with documents B-D.

Present invention discloses a tracking device for obtaining container position information, which is communicated wirelessly to a remote site. It is determined if the container is in proximity to an aircraft by detection of electromagnetic field, and if so, the communication is disabled. Reactivating of the communication is allowed if simultaneously no electromagnetic field is detected and the tracking device is able to determine a container position.

Document A discloses a method for deactivation of fieldemitting electronic device upon detection of a transportation vessel, such as aircraft. The electronic device contains a interfere with the field-emitting device that may electronic device The is transportation vessel systems. capable of deactivating the power from the field-emitting device when the transportation vessel is detected, so that the device does not interfere with the field-emitting transportation vessel.

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#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of: Box V

The electronic device, comprising a control unit, may be coupled to one or more sensors that are used to determine if the electronic device is proximate to the transportation vessel, so that the field-emitting device can be decoupled from power. In one embodiment, the electronic device contains also a tracking device and is associated with a container for shipping of goods. The tracking device receives information regarding the location of the container, and the electronic device communicates this information for tracking purposes. The tracking device may be a field-emitting device that is decoupled from power when the proximity of a transportation vessel is detected.

The field-emitting device can also be reactivated when some conditions are fulfilled.

For example, when positioning information is received successfully again by the tracking device, after previous deactivation, the field-emitting device is reactivated and resumes the transmission of positioning information concerning the location of the electronic device to the remote site.

In the other case, the control unit determines if the electronic device is outside the proximity of the aircraft by checking status of sensors and waits until the electronic device is outside the proximity of the aircraft, at which time the electronic device reactivates previously deactivated field-emitting device.

In the third case, the control unit determines if the electronic device is to be disabled for a specified period of time. Then, the control unit waits until the specified time has lapsed before the electronic device reactivates previously deactivated field-emitting device. The control system can also determine if the deactivation period should be based on the itinerary of the electronic device. For instance, the desired period of deactivation may extend until the aircraft is scheduled to land or reach its final destination. Even combination of different events is possible.

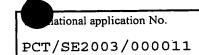
(See paragraphs 0006-0008; 0064-0068; fig. 1-3,7).

However, none of the cited documents discloses a device and a method where the selection of two proximity methods are combined in a decision for reactivation and where the first proximity method is based on measuring electromagnetic fields

from the aircraft, and the other is measuring any contact with any external positioning system.

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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY



#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of:  $Box\ V$ 

In view of the cited documents such a method and a device cannot be considered obvious to a person skilled in the art.

Therefore the invention claimed in claims 1 - 14 is novel and considered to involve an inventive step.

The invention is considered to be industrially applicable.